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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,075	11/17/2003	Peter A. Liken	TI-125US	3297
24314	7590	07/13/2005	EXAMINER	
JANSSON, SHUPE & MUNGER & ANTARAMIAN, LTD			PATEL, PARESH H	
245 MAIN STREET			ART UNIT	
RACINE, WI 53403			PAPER NUMBER	
			2829	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H/A

Office Action Summary	Application No.	Applicant(s)	
	10/715,075	LIKEN ET AL.	
	Examiner	Art Unit	
	Paresh Patel	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 8-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: terminology used in detail description is different from claimed terminology. For example, side brackets 12, end most side brackets 14, 15 and top brackets 21, 22 as disclosed in detail description are not found in the claims. Applicant is required to provide reference characters (as shown in the drawings) into parentheses next to the claimed elements so as to avoid confusion with other claimed elements.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the all the elements of claim must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Appropriate correction is required.

Claim Objections

3. Claims 3 and 7 are objected to because of the following informalities: "the guide carrying member(s)" as claimed in not clear because it seems disclosure does not support it. Appropriate correction is required.

For the purpose of the Examination and to expedite the process of prosecution Examiner assumes that "the guide carrying member(s)" is/are a side brackets 12, 14 and 15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (US 6331940).

Regarding claims 1 and 34, Lin in fig. 3-4 discloses a carrier of circuit boards comprising:

a base frame [90] (means for securing first side edges of claim 34) having a first card guide [84] disposed on its upper surface [see fig. 3], the first card guide for securing respective first side edges of a corresponding circuit board [80];

a second card guide [35, 31 of 20] (means for securing second side edges of claim 34) for securing respective second side edge of the circuit board; and

an adjustment member [20] (adjustment means of claim 34), each being for individually adjusting a distance between a respective pair of one first card guide and one second card guide.

Lin does not disclose said base frame having a **plurality of** first card guides and **plurality of** second card guides **for plurality of** circuit boards, and a plurality of adjustment members. However, it is clear from above that Lin discloses claimed carrier for one circuit board. It would have been obvious matter of design choice to modify the Lin to use multiple first and second guides and a plurality of adjustment members as

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claimed for plurality of circuit boards on base frame 90, in order to secure the circuit board of different height in the bracket (see lines 40-47 and summary of the invention at column 1 and Summers et al. US 5822193 for plurality of circuit boards 70 on base frame of fig. 3).

Regarding claim 2, Lin discloses each adjustment member includes:

at least one support [33 and 37 of 20]; and

a securing mechanism [70] structured to secure the respective second card guide for snugly holding one of the plurality of circuit boards between the first card guide and the second card guide.

Regarding claim 3 (as best understood), Lin discloses the at least one support includes at least one slotted rail [39 of 20] disposed **normal to the upper surface** of the base frame, and the securing mechanism is structured to set a location of the guide carrying member [50 along the at least one slotted rail.

Regarding claim 4, Lin discloses the securing mechanism includes at least one threaded projection member [70] that extends through a slot of the slotted rail, and a threaded nut [58] for receiving the threaded projection member.

Regarding claim 5, Lin discloses the nut 58. Lin does not disclose the nut is one of a T-slot nut and a wedge nut. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use one of a T-slot nut and a wedge nut, since it is well known in the art at this nut is used as locking means for variety of application.

Regarding claim 6, Lin discloses the at least one slotted rail. However, Lin does not disclose the at least one slotted rail includes at least one T-slotted rail. It would have been an obvious matter of a design choice to use known T-slotted rail [see applicant disclosure at paragraph 0032 of publish application US 2005/0106926] for carrier of circuit board, since applicant has not disclosed that use of T-slotted rail solves any stated problems or is for any particular purpose and it appears that the invention would perform equally well with slotted rail of claim 3.

Regarding claim 7, Lin discloses a guide carrying member [50] that individually carry respective ones of the second card guides essentially parallel to the base frame. Lin does not disclose a plurality of guide carrying members. However, it is clear from above that Lin discloses claimed a guide carrying member to support second card guide, in order to secure circuit board. Therefore, it would have been obvious matter of design choice to modify the Lin to use plurality of a guide carrying members on base frame 90, in order to support the plurality of second card guide for securing circuit boards and it appears that the invention would perform equally well this modification.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 7 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Summers et al. (US 5822193).

Regarding claims 1 and 34, Summers et al. (hereafter Summer) discloses a carrier 15 of circuit boards comprising:

a base frame [bottom surface where pcb 70 is connected via a connector, see fig. 1 or 3] (means for securing first side edges of claim 34) having a plurality of first card guides [connector for 70] disposed on its upper surface, the first card guides for securing respective first side edges [edges of 70] of a corresponding plurality of circuit boards [plurality of 70, see fig. 1 or 3];

a plurality of second card guides [30] (means for securing second side edges of claim 34) for securing respective second side edges [edges of pcb 70] of the plurality of circuit boards; and

a plurality of adjustment members [threads of 40] (adjusting means of claim 34), each being for individually adjusting a distance between a respective pair of one first card guide and one second card guide [by adjusting 30 using 50 of 40].

Regarding claim 7, Summers discloses a plurality of guide carrying members [40, fig. 3] that individually carry respective ones of the second card guides essentially parallel to the base frame.

Response to Arguments

8. Applicant's election with traverse of Group I (claims 1-19 and 34) and further election of choice C (i.e. carrier of claim 7) in the reply filed on 05/31/2005 is

acknowledged. The traversal is on the ground(s) **that material differences between the inventions and alternative use has not been shown.** This is not found persuasive because of burdensome search require between the different inventions. For example, see following reasons: 1) structure of carrier for circuit boards as disclosed in Invention I does not require circuit boards and communication means between them as disclosed in the Invention II; 2) testing, communication, calibration as disclosed in the Invention II is not required for the Invention I; and 3) they do have alternate use because structure (e.g. see US 4099623) of Invention I can be used for holding the circuit boards using different species (see claim 8, 9 and 10) whereas Invention II uses means for communication for testing, calibration etc.

Similar arguments were found for the other Groups. Examiner disagrees with applicants for the same reasons as above.

With respect to species election, Applicants refers to the above arguments and further argues that citations of 35 U.S.C. §121 are inappropriate since that statute applies only to divisional applications, not relevant here. Examiner disagrees because it is not true see below.

35 U.S.C. 121. Divisional applications.

If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions. If the other invention is made the subject of a divisional application which complies with the requirements of section 120

of this title it shall be entitled to the benefit of the filing date of the original application. *A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application. If a divisional application is directed solely to subject matter described and claimed in the original application as filed, the Director may dispense with signing and execution by the inventor. The validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention.*

However, claims 1-7 and 34 have been examined here because they read on fig. 1-3. Again, as stated in the last office action "upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

The requirement is still deemed proper and is therefore made FINAL.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 571-272-1968. The examiner can normally be reached on 8:00 to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is ~~703-872-9300~~ ⁵⁷¹⁻²⁷³⁻⁸³⁰⁰.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



July 07, 2005

Paresh Patel
Primary Examiner
Art Unit 2829